

REMARKS

The Office Action dated January 10, 2003 has been received and carefully noted. Claims 1, 2 and 4-7 are pending and have been examined. Claims 1, 2 and 4 remain rejected under 35 U.S.C. §102(e) as being anticipated by *Timbs et al.* (U.S. Patent No. 6,018,521). Claims 5-7 remain rejected under 35 U.S.C. §103(a) as being unpatentable over *Timbs et al.* in view of *Korpela* (U.S. Patent No. 5,946,634). Claim 7 remains rejected under 35 U.S.C. §103(a) as being unpatentable over *Timbs et al.* in view of *Takase et al.* (U.S. Patent No. 5,963,555). The above rejections are respectfully traversed based on the remarks that follow.

The invention is directed to, as recited in independent claim 1, a broadband cellular network device. The device includes a base station control unit adapted to control distribution of ATM cellular traffic having ATM cells and an ATM controller, where the controller is separate from the base station control unit, but connected to and being controlled by the base station control unit. The device also has an ATM switching means connected to and being controlled by the ATM controller and adapted to switch ATM cellular traffic. The ATM controller is arranged to function between the base station control unit and the ATM switching means and is arranged to provide an interface *for converting commands of a first communication protocol, issued by the base station controller unit, into commands of a second communication protocol, causing switching actions.* The ATM controller is also an interface for issuing commands for connecting and disconnecting traffic channels passing through the ATM switching means.

Timbs et al. is directed to a network interface subsystem for use in an ATM communications system. The network interface (NI) system is comprised of a base transceiver subsystem (BTS), a base station controller (BSC), a Base Station Transceiver Subsystem Interface (BTSI), a transcoder (XC), an operations maintenance and control subsystem (OMC), and an ATM switch providing for communications of the electronic data as packetized ATM cells between the BTSI, NI, XC, and the BSC. The BTSI is coupled to each of the cell sites and to the ATM switch and provides for packetizing the electronic data as ATM cells for transmission by the ATM switch, for transmitting and receiving the packetized ATM cells communications with the ATM switch, and for depacketizing the electronic data responsive to the received ATM cells from the ATM switch.

However, *Timbs et al.* fails to teach or suggest all of the elements of the present claims. *Timbs et al.* discloses packets being converted into cells and discloses that the BSC acts as an interface with the mobile switching center (MSC) for radio resource management, channel allocation and coordination of radio resources for origination, termination and handoff of calls. However, while *Timbs et al.* discloses the conversion of packets into cells, that does not teach or suggest converting commands, as recited in claim 1.

Applicants have put forth this distinction previously, but the Office has not found the distinction to be compelling. In the Response to Arguments section of the last Office Action, it is again alleged that *Timbs et al.* “does disclose converting formats including

commands back and forth between communication protocols” and “all commands in other protocols must be converted into the protocol supported by the ATM switch in order for the switch to understand and perform its switching function.” Applicants understand the above arguments but respectfully assert that *Timbs et al.* does not disclose what has been alleged.

In actuality, *Timbs et al.* discloses an appropriate command conversion between different formats (not protocols) as necessary. The particular the passage cited by the Office, column 7, lines 62 to 67, recites: The BSC 220 further provides means for connection management and configuration of the ATM switch 251 to permit the communication and data flow necessary to provide for the AXC 250 operation, to provide for transmission format and voice transcoding format conversion back and forth between the air protocol and the land-line protocol.” This is not the same as an ATM controller that is arranged to provide an interface for converting commands of a first communication protocol, *issued by the base station controller unit*, into commands of a second communication protocol, *causing switching actions*.

The cited section of *Timbs et al.* and figure 1 of *Timbs et al.* should lead one to understand that *Timbs et al.* suggests that the AXC is able to make transcoder or transmission format conversions between the switch (251) and other networks (landline or air protocol). The BSC of *Timbs et al.* is NOT connected to the switch via AXC and AXC is NOT converting commands from the BSC into commands of another protocol

causing switching functions. Therefore, the elements of claim 1, recited to be arranged to provide the recited functionalities, are not taught by *Timbs et al.*

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). In the present case, *Timbs et al.* fails to teach an ATM controller that is arranged to provide an interface for converting commands of a first communication protocol, issued by the base station controller unit, into commands of a second communication protocol, causing switching actions. As such, Applicants respectfully assert that the anticipation rejection of claims 1, 2 and 4, where claims 2 and 4 depend from claim 1, is improper and should be withdrawn.

Additionally, claim 1 recites, in part, that the ATM controller is arranged to function between the base station control unit and the ATM switching means. *Timbs et al.* fails to teach or suggest such a configuration. In the Response to Arguments section, the Office alleges that the ATM controller of *Timbs et al.* is separate from the base station control unit and is functionally located in the location in the telecommunication hierarchy. However, referring to *Timbs et al.*, it is clear that the Path Connection Manager 105 functionally belongs to the BSC and still does not convert commands causing switching actions. For this additional reason, Applicants respectfully assert that that the anticipation rejection of claims 1, 2 and 4 is improper and should be withdrawn.

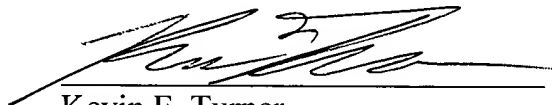
With respect to the rejections of claims 5-7, even if Applicants accepted that *Korpela* and *Takase et al.* teach what the Office has alleged, neither reference cures the deficiencies of *Timbs et al.* discussed above. Indeed, neither secondary reference teaches or suggests, taken together or apart, an ATM controller that is arranged to provide an interface for converting commands of a first communication protocol, issued by the base station controller unit, into commands of a second communication protocol, causing switching actions. As such, Applicants respectfully assert that the rejection of claims 5-7 are improper for failing to teach all of the elements of those claims by virtue of their dependence on claim 1. Reconsideration and withdrawal are respectfully requested.

Claims 1, 2 and 4-7 are pending. Claims 2 and 4-7 depend from claim 1. The Applicant respectfully submits that claims 2 and 4-7 are additionally allowable for their dependency from allowable base claim 1, as well as for the additional subject matter recited therein. As discussed above, claims 1, 2 and 4 were over *Timbs et al.*, claims 5-7 were rejected over *Timbs et al.* in view of *Korpela*, and claim 7 was rejected over *Timbs et al.* in view of *Takase et al.* However, none of the references either singly or in combination disclose or suggest an ATM controller that is arranged to provide an interface for converting commands of a first communication protocol, issued by the base station controller unit, into commands of a second communication protocol, causing switching actions, as recited in the claims. As such, the Applicants respectfully request allowance of claims 1, 2 and 4-7 and the prompt issuance of a Notice of Allowability.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the Applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

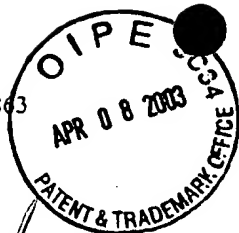
A handwritten signature in black ink, appearing to read 'Kevin F. Turner', written over a horizontal line.

Kevin F. Turner
Registration No. 43,437

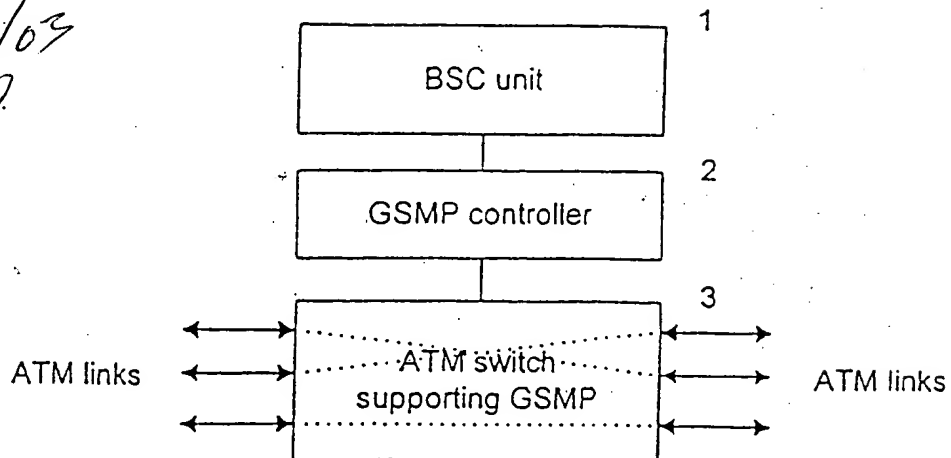
Customer No. 32294
SQUIRE, SANDERS & DEMPSEY LLP
14TH Floor
8000 Towers Crescent Drive
Tysons Corner, Virginia 22182-2700
Telephone: 703-720-7800
Fax: 703-720-7802

KFT:lls

Enclosures: Submission of Formal Drawings
Copy of Filed Revocation and New Power of Attorney

2 / 2
Fig. 4

approved
4/29/03
HN

Fig. 5
(PRIOR ART)